

# [Clean Air Toilet System-Tank "C.A.T.S - Tank"]

## Abstract

*The title of innovative concept: Clean Air Toilet System Tank or C.A.T.S-Tank* The C.A.T.S-Tank is a new type of Toilet Tank with a dual function:

- a) Exhaust the Odorous Air directly from the Toilet Bowl (novel function) before the Odor spreads into the bathroom.
- b) Hold the necessary water to flush in the Toilet Bowl (standard function)

*The current demands are:*

- Improved the indoor air quality
- Reduced the noise from the Mechanical Ventilation System in the bathroom
- Electricity efficient
- Water efficient
- Improved indoor air quality.
- Reduced the cost of utilities. The C.A.T.S-Toilet System is a solution to all the above demands.

*The C.A.T.S-Tank comprising:*

- (1) Odor Air Grille and Odor Filter (novel function and location)
- (2) Air Odor Duct (novel location)
- (3) C.A.T.S-Tank Water Container
- (4) C.A.T.S-Tank Openings (novel function)
- (5) C.A.T.S-Tank Lid
- (6) Odor Air Tight Insulation (novel function and location)

*How it works:* The C.A.T.S-Tank is connected to the existing bathroom Exhausting System. When turning the bathroom light switch on, the Exhaust Fan above the ceiling and C.A.T.S-Tank system start to work simultaneously. The Odor Air Grille located in front bottom of the C.A.T.S-Tank, removes the Odorous Air from the toilet bowl before it spreads into the bathroom. The Odorous Air travels from the toilet bowl into the C.A.T.S-Tank Odor Duct and further up (through the existing bathroom Exhaust System) and is then released into the outside air. Passing through the Odor Filter, the air emitted to the outside environment, is cleaner and healthier than the air emitted from the existing system *The advantages of C.A.T.S-Tank*

- a) Improves the indoor air quality
- b) Improves the efficiency of the existing Mechanical Ventilation System
- c) Contributes to the protection of the Environmental air quality

- d) Saves Energy (Electricity)
- e) Saves Water (reducing the toilet water tank capacity)
- f) Improves indoor air quality and the level of living comfort
- g) It is silent, work automatically, it is easy to use and has no moving parts.
- h) Very inexpensive by using the existing features.
- I) Reduces the cost of utilities.

It is a well known fact that today's excessive use of deodorant spray and all other expensive deodorant products used to cover the odorous air are environmentally hazardous, unsafe for human health and expensive. The C.A.T.S-Tank is a perfect solution to all the existing tasks and demands with a minimum investment.